Abstract (en)
A method for selecting at least one surface in a light field is disclosed. Such a light field is associated to multiple views corresponding to different view points of a same scene. The method comprises: - displaying (S402) one of the multiple views as a reference view; - selecting (S403) at least one surface in the reference view; - identifying (S404) a set of pixels belonging to the selected surface, which are occluded in the reference view but visible in at least one of the multiple views; - projecting (S405) the set of pixels into the reference view, on the basis of a value of the pixels of the set in the view or views in which they are visible, in order to form an upgraded reference view; - displaying (S406) the upgraded reference view; - updating (S407) said selected surface in said upgraded reference view.

IPC 8 full level
G06T 11/60 (2006.01)

CPC (source: EP US)
G06T 11/60 (2013.01 - EP US); **G06T 15/20** (2013.01 - US); **G06T 15/40** (2013.01 - US); **G06T 15/50** (2013.01 - US); **G06T 19/20** (2013.01 - US); G06T 2200/21 (2013.01 - EP US); G06T 2200/24 (2013.01 - EP US); G06T 2207/10052 (2013.01 - EP US); G06T 2219/2012 (2013.01 - US); G06T 2219/2016 (2013.01 - US)

Citation (applicant)
- US 2013222633 A1 20130829 - KNIGHT TIMOTHY JAMES [US], et al
- WO 2014149403 A1 20140925 - PELICAN IMAGING CORP [US]
- GB 2488905 A 20120912 - CANON KK [JP]
- EP 2244484 A1 20101027 - RAYTRIX GMBH [DE]
- "Plenoptic image editing", PROCEEDINGS OF IEEE 6TH INTERNATIONAL CONFERENCE ON COMPUTER VISION, 1998
- REN NG, DIGITAL LIGHT FIELD PHOTOGRAPHY, July 2006 (2006-07-01)
- S. WANNER ET AL., GENERATING EPI REPRESENTATION OF A 4D LIGHT FIELDS WITH A SINGLE LENS FOCUSED PLENOPTIC CAMERA, 2011
- HOG: "European Conference on Computer Vision", 2016, SPRINGER INTERNATIONAL PUBLISHING, article "Light Field Segmentation Using a Ray-Based Graph Structure"
- THONAT, T.; SHECHTMAN, E.; PARIS, S.; DRETTAKIS, G.: "Multi-View Inpainting for Image-Based Scene Editing and Rendering", FOURTH INTERNATIONAL CONFERENCE ON 3D VISION (3DV), 2016
- SABATER, N.; BOISSON, G.; VANDAME, B.; KERBIRIOU, P.; BABON, F.; HOG, M.: "Dataset and Pipeline for Multi-view Light-Field Video", PROCEEDINGS OF THE IEEE CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION WORKSHOPS, 2017
- KAZHDAN, M.: "Screened poisson surface reconstruction", ACM TRANSACTIONS ON GRAPHICS (TOG), vol. 32, no. 3, 2013, pages 29, XP058043598, DOI: doi:10.1145/2487228.2487237
- SORKINE, O.; COHEN-OR, D.; LIPMAN, Y.; ALEXA, M.; RÖSSL, C.; SEIDEL, H. P.: "Laplacian Surface Editing", EUROGRAPHICS/ACM SIGGRAPH SYMPOSIUM ON GEOMETRY PROCESSING, 2004
- IGARASHI, T. I.: "Implementing As-Rigid-As-Possible Shape Manipulation and Surface Flattening", JOURNAL OF GRAPHICS, GPU, AND GAME TOOLS, 2009

Citation (search report)
- [A] US 2014059462 A1 20140227 - WERNERSSON MATS [SE]
- [A] US 2007236507 A1 20071011 - TIGGES MARK H A [CA]
- [Y] ADRIAN JARABO ET AL: "How do people edit light fields?", ACM TRANSACTIONS ON GRAPHICS (TOG), ACM, US, vol. 33, no. 4, 27 July 2014 (2014-07-27), pages 1 - 10, XP058051940, ISSN: 0730-0301, DOI: 10.1145/2601097.2601125
- [Y] IVAN VIOLA ET AL: "Smart Visibility in Visualization", COMPUTATIONAL AESTHETICS IN GRAPHICS, VISUALIZATION AND IMAGING, 18 May 2005 (2005-05-18), pages 209 - 216, XP058118849, ISBN: 3-905673-27-4, DOI: 10.2312/COMPAESTH/COMPAESTH05/209-216
- [Y] "3D interaction / Navigating / Global or Local View", BLENDERWIKI, 15 November 2011 (2011-11-15), XP055437011, Retrieved from the Internet <URL:https://wiki.blender.org/index.php?title=Doc:2.4/Manual/3D_interaction/Navigating/Global_or_Local_View&oldid=158165> [retrieved on 20171220]
- [A] WU GAOCHANG ET AL: "Light Field Image Processing: An Overview", IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING, IEEE, US, vol. 11, no. 7, 1 October 2017 (2017-10-01), pages 926 - 954, XP011672035, ISSN: 1932-4553, [retrieved on 20171025], DOI: 10.1109/JSTSP.2017.2747126

Cited by
CN114202620A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3477595 A1 20190501; EP 3477596 A1 20190501; EP 3477596 B1 20210609; US 10762689 B2 20200901; US 2019130632 A1 20190502